

Appl. No. 10/052,733
Atty. Docket No. G-262M (CP-1221)
Amdt. Dated December 30th, 2003
Reply to Office Action of October 3rd, 2003
Customer No. 27752

REMARKS

Claim 1 remains pending in the present application. Claims 2-13 are non-elected and may be cancelled upon the indication of allowable subject matter. No claim amendments have been made. No new matter has been added. No additional Claim fee is due.

Claim 1 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Vayssie, U.S. Patent No. 5,073,174.

The Vayssie reference discloses dye precursors and dyeing agent for the dyeing of keratinous fibers such as hair. Vayssie discloses 2-hydroxymethyl-4-aminophenol and 2-(beta-hydroxyethyl)-4-aminophenol as hair dye precursors. Vayssie does not disclose Applicants claimed 4-Amino-2-(1-hydroxy-ethyl)-phenol. It is the contention of the Examiner that the use of Applicants claimed compound as a hair dye intermediate is obvious to one of ordinary skill in the art as Vayssie discloses that one carbon homolog of the claimed compound and a simple structural isomer of the compound have the same utility as that disclosed by Applicant and one of ordinary skill in the art would expect the recited compound to have similar properties. Applicants respectfully traverse this rejection.

The Examiner contends that Applicants claimed compound is prima facie obvious due to its structural similarity with compounds of the prior art. However, it is well established that for such a prima facie case of obviousness based on structural similarity to exist there must be an expectation of similar results. It is in this regard that the Examiner's assertion of obviousness falls short. The arena of dye precursors for the dyeing of keratin fibers is not an easily predictable art. In addition, the dyeing profile of a particular dye precursor is often dependent upon the particular coupler with which it is combined to create a suitable coloring composition. Thus, compounds that would appear on their face to provide satisfactory dyeing properties more frequently fall short in their ultimate performance. Such is the case for the Examiner's assumption that structural similarity leads to similar results. In fact, this is not the case. Compounds which are structurally similar often deliver much different dyeing profiles. While one compound is highly effective with a particular coupler, the other is ineffective. Change the coupler and both compounds perform substantially the same.

The Examiner's attention is drawn to Table 2 of the present specification, which display dyeing result for 3-methyl-p-aminophenol and 2-methyl-p-aminophenol with several different couplers to generate red dye results. Noting the a* value which is an indication of red color, when 2-Me PAP and 3-Me PAP are combined with the coupler 2-methyl-1-naphthol the difference between the color values of the 2-Me PAP and 3-Me PAP is a mere 2%. However, when employing the coupler 5-amino-2-methylphenol the difference jumps to more than 40% at 44%.

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The remaining 2 couplers show a similar effect with 1-naphthol giving an 11% difference and 2, 4 diaminophenoxyethanol giving a 34% difference. Thus, there is a large variation in the performance of structural similar compounds such as the structural isomers 3-methyl-p-aminophenol and 2-methyl-p-aminophenol.

Clearly then, structural similarity is but a small aspect of the equation when determining the effectiveness of a dye precursor compound. The result is a high degree of unpredictability in the design of suitable dye components. Accordingly, the "expectation of similar results" in the arena of dye design and development based on structural similarity alone does not exist and, therefore may not be assumed by the Examiner to establish a prima facie case of obviousness. To do so would require the application of an Obvious to try standard which, as the Examiner is well aware, is unacceptable for establishing a prima facie case of obviousness. Accordingly, Claim 1 is novel and unobvious over the prior art of record and any modification thereof.

Conclusion

In light of the remarks presented herein, Applicants' respectfully submit that Claim 1 is allowable over the prior art of record or any combination thereof. Reconsideration and reexamination are respectfully requested. In the event that issues remain prior to allowance of the noted claims, then the Examiner is invited to call Applicants' undersigned attorney to discuss any remaining issues.

Respectfully submitted,

By 

Brian M. Bolam
Attorney for Applicant(s)
Registration No. 37,513
(513) 626-4756

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